## **CLAIMS**

1.- Oil from seeds, said oil comprising:

an oleic acid content of more than 5% and less than 65% by weight based upon the total fatty acid content, a linoleic acid content of more than 1% and less than 65% by weight based upon the total fatty acid content, a palmitic acid content of more than 20% and less than 40% by weight based upon the total fatty acid content, a stearic acid content of more than 3% and less than 15% based upon the total fatty acid content, characterized in that the palmitoleic acid content is less than 4% based upon the total fatty acid content and the asclepic acid content is less than 4% based upon the total fatty acid content.

- 2.- Oil from seeds according to claim 1, characterized in that the palmitoleic acid content is less than 3% based upon the total fatty acid content.
- 3.- Oil from seeds according to claim 1, characterized in that the asclepic acid content is less than 2% based upon the total fatty acid content.
- 4.- Oil from seeds according to claim 1, characterized in that the oleic acid content is at least 40% by weight based upon the total fatty acid content.
- 5.- Oil from seeds according to according to claim 1, characterized in that the total level of saturated fatty acids is at least 24% by weight based upon the total fatty acid content.
- 6.- Oil from seeds according to claim 5, characterized in that the total level of saturated fatty acids is at least 35% by weight based upon the total fatty acids content.
- 7.- Oil from seeds according to claim 6, characterized in that the total level of saturated fatty acids is at least 45% by weight based upon the total fatty acids content.
- 8.- Oil from seeds according to claim 1, characterized in that the linoleic acid content is less than 18% by weight based upon the total fatty acids content.

- 9.- Oil from seeds according to claim 1, characterized in that the oil has less than 10% by weight of the saturated fatty acid groups in the 2 position of the triacylglycerol molecules of the oil.
- 10.- Oil from seeds according to claim 9, characterized in that the oil has a maximum of 5% of the saturated fatty acid groups in the 2 position of the triacylglycerol molecules of the oil.
- 11.- Oil from seeds according to claim 1, which oil is a sunflower oil.
- 12.- Oil from seeds according to claim 11, characterized in that the oil is extracted from sunflower seeds obtained by crossing sunflower seeds of the mutant sunflower line IG-1297M deposited on 20 January 1998 with ATCC under deposit accession number ATCC-209591 with the mutant sunflower line CAS-3, deposited on 14 December 1994 with the ATCC under deposit accession number ATCC-75968.
- 13.- Sunflower seeds comprising a sunflower oil having:
- an oleic acid content of more than 5% and less than 65% by weight based upon the total fatty acid content,
- a linoleic acid content of more than 1% and less than 65% by weight based upon the total fatty acid content,
- a palmitic acid content of more than 20% and less than 40% by weight based upon the total fatty acid content,
- a stearic acid content of more than 3% and less than 15% based upon the total fatty acid content,
- characterized in that the palmitoleic acid content is less than 4% based upon the total fatty acid content, and;
- the asclepic acid content is less than 4% based upon the total fatty acid content.
- 14.- Sunflower seeds comprising a sunflower oil according to claim 2.
- 15.- Method for preparing sunflower seeds as claimed in 13, comprising the steps of:

- a) crossing sunflower seeds of the mutant sunflower line IG-1297M deposited on 20 January 1998 with ATCC under deposit accession number ATCC-209591 with the mutant sunflower line CAS-3, deposited on 14 December 1994 with the ATCC under deposit accession number ATCC-75968.
- b) self-pollinating F1 progeny plants of step a) for at least two generations to produce inbred plants.
- c) selecting from the progeny of step b) plants with seeds containing an oil having a palmitic acid content of more than 20%, a palmitoleic acid content of less than 4% and an asclepic acid content of less than 3%.
- d) collecting progeny seeds from step c) and optionally
- e) repeating the cycle of culturing, selection and collection of seeds
- 16.- Method for preparing sunflower oil according to claim 1, by extracting sunflower seeds as claimed in claim 1.
- 17.- Use of oil according to claim 1 at high temperature conditions.
- 18.- Use of oil as claimed in claim 17, wherein the high temperature conditions constitute baking.
- 19.- Use of oil as claimed in claim 17, wherein the high temperature conditions constitute cooking.
- 20.- Use of oil as claimed in claim 17, wherein the high temperature conditions constitute roasting.
- 21.- Use of oil as claimed in claim 17, wherein the high temperature conditions constitute heating by any means at temperatures of at least 70°C.
- 22.- Use of oil in claim 1 in the production of edible fats or fat mixtures, such as margarine or vegetable-dairy.
- 23.- Use of oil in claim 1 in confectionery or bakery.